

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~Substantially~~ A substantially flat rotating field antenna comprising:

_____ a central loop ~~and coplanar eccentric loops, antenna wherein,~~ the central loop ~~creating being structured to create~~ a magnetic field essentially perpendicular to the ~~antenna,~~
~~the antenna comprises antenna; and~~

_____ four adjacent coplanar eccentric loops, ~~supplied in such a way as the eccentric~~
~~loops being structured and supplied~~ to create a rotating field predominantly in a plane parallel
to ~~the a~~ plane of the antenna, ~~the eccentric loops being spaced apart from each other and being~~
~~spaced from a center of the central loop, and the a center~~ centres of gravity of the of each
eccentric ~~loops loop~~ being arranged substantially on ~~at~~ the periphery of the central loop.
2. (Currently Amended) ~~Antenna~~ The antenna according to claim 1, wherein the
eccentric loops are associated in pairs of non-adjacent loops so as to generate electromagnetic
fields of opposite phases in ~~said pair~~ the pairs.
3. (Currently Amended) ~~Antenna~~ The antenna according to claim 2, wherein ~~the~~
two eccentric loops of a pair are connected in such a way that a same current is flowing
through them in opposite trigonometric directions.
4. (Currently Amended) ~~Antenna~~ The antenna according to claim 1, wherein the
~~four~~ eccentric loops are arranged symmetrically with respect to the ~~centre~~ center of the central
loop.
5. (Currently Amended) ~~Antenna~~ The antenna according to claim 1, wherein the
central loop is substantially rectangular.

6. (Currently Amended) ~~Antenna~~ The antenna according to claim 1, wherein the eccentric loops are substantially triangular, an apex of each triangle being located in ~~the~~ a central zone of the antenna.

7. (Currently Amended) ~~Antenna~~ The antenna according to claim 1, wherein the eccentric loops are substantially rectangular.

8. (Currently Amended) A radiofrequency ~~Radiofrequency~~ identification system ~~comprising~~ comprising:

a substantially flat rotating field antenna according to claim 1, comprising antenna, the antenna including:

a central loop, the central loop being structured to create a magnetic field essentially perpendicular to the antenna; and

four adjacent coplanar eccentric loops, the eccentric loops being structured and supplied to create a rotating field predominantly in a plane parallel to a plane of the antenna, centers of gravity of the eccentric loops being arranged substantially on a periphery of the central loop; and

a radiofrequency generator including ~~comprising~~ first and second outputs respectively supplying first and second excitation signals alternately respectively to the central loop and to the eccentric loops.

9. (Currently Amended) The system ~~System~~ according to claim 8, further comprising phase shift means connected to the second output and supplying phase quadrature signals to the eccentric loops.

10. (Currently Amended) The system ~~System~~ according to claim 8, wherein the eccentric loops are associated in pairs, ~~the two~~ eccentric loops of a pair being connected to one another and to common terminals, so that a same current flows through them in opposite trigonometric directions, the system further comprising a power divider connected to the

second output of the generator and supplying phase quadrature signals, on two outputs, respectively applied to the common terminals of each of the ~~two~~ pairs.

11. (Currently Amended) ~~System~~ The system according to claim 8, wherein the radiofrequency generator comprises means able to supply first and second excitation signals at different frequencies.

12. (New) The antenna according to claim 1, wherein the eccentric loops are formed of a conductive material.

13. (New) The antenna according to claim 2, wherein each pair of non-adjacent loops is formed by a conductive material.

14. (New) A substantially flat rotating field antenna comprising:
a central loop, the central loop being structured to create a magnetic field essentially perpendicular to the antenna; and
two conductors, each conductor forming a pair of non-adjacent coplanar eccentric loops, the pairs being structured and supplied to create a rotating field predominantly in a plane parallel to the plane of the antenna and to generate electromagnetic fields of opposite phases in the pairs, and centers of gravity of each eccentric loop being arranged substantially on a periphery of the central loop.